

# Notice of Allowability

Application No.

09/874,016

Examiner

Mary Cheung

Applicant(s)

SUZUKI, MOTOHIRO

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 30 August 2004.
2. ☒ The allowed claim(s) is/are 1-25.
3. ☒ The drawings filed on 06 June 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

JAMES P. TRAMMELL  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3300

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with attorney David Blumenthal on October 21, 2004.

3. The application has been amended as follows:

Claim 4 has been replaced to read

--4. An on-demand service expanding system as claimed in claim 2, further comprising:

said server being provided with a service forecasting means for extracting service contents that are forecasted to be used by at least one of said plurality of clients; and

said front-end being provided with a means for receiving from the server service contents that are forecasted to be used by said at least one of said plurality of clients and maintaining the same to provide the service contents received with respect to the at least one of said plurality of clients in question.--

Claim 5 has been replaced to read

--5. An on-demand service expanding system as claimed in claim 4, comprising:

a means wherein the service broker transmits such a demand that the server extracts service contents that are forecasted to be used by at least one of said plurality of clients in a parallel manner during a period of time in which the at least one of said plurality of clients checks or newly establishes a front-end to be connected with the at least one of said plurality of clients at the time when the at least one of said plurality of clients is connected with the service broker, and transfers the service contents extracted to the front-end in question with respect to the server from which a service to be received by the at least one of said plurality of clients is supplied through the broker controller, whereby the service contents that are forecasted to be used by the at least one of said plurality of clients have been already present in the front-end in question at the time when the at least one of said plurality of clients transmits a demand for use of service to the front-end in question.--

Claim 6 has been replaced to read

--6. An on-demand service expanding system as claimed in claim 4, wherein:

said service-forecasting means involves a means for maintaining an access history with respect to Web pages by at least one of said plurality of clients, and forecasting a service, which will be used by the at least one of said plurality of clients from the history.--

Claim 7 has been replaced to read

--7. An on-demand service expanding system as claimed in claim 4, wherein:

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said service forecasting means involves a means for selecting e-mails that have been addressed to the at least one of said plurality of clients based on an identifier delivered from said broker controller.--

Claim 8 has been replaced to read

--8. An on-demand service expanding system as recited in claim 2 further comprising:

a system for providing services involving a communication network provider, service providers, and said customers, wherein:

said communication network provider operating said communication network by the use of communication equipment and said computers to provide a connection service with the communication network operated by the communication network provider with respect to the customers, wherein an environment making possible to provide services to the customers by the use of the on-demand service expanding system residing on the communication network constructed by the communication network provider (hereinafter referred to as "service providing environment") is supplied to a plurality of the service providers, so that use fees for the service providing environment in response to use fees for resources of the communication equipment in addition to communication fees for the communication network operated by the communication network provider are collected from the plurality of service providers; and

said service providers constructing servers and front-ends in which services to be provided to the customers have been installed in the service providing

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environment supplied from said communication network provider to distribute clients to the customers thereby to provide services with respect to the customers, and determining use fees of a service to be supplied to the customers from the service providers themselves taking into consideration fees to be paid to the communication network provider, and collecting the fees determined from each customer who makes an agreement with the service providers in use of services.--

Claim 9 has been replaced to read

--9. A computer readable storage medium, storing a program which, when executed on computers or communication devices used in an on-demand service expanding system connectable to a system provided with a server is operable for

supplying a variety of services including a connection service with a communication network,

permitting reception by a plurality of clients for receiving said variety of services,

permitting operation of a plurality of front-ends interposed between said plurality of clients and said server and executing a part of said variety of services of said server based on a demand from each of said plurality of clients,

permitting connection of service expanding equipment to a communication base,

said on-demand service expanding system having at least one service broker, and at least one broker controller; said program begin further operative for

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permitting said service broker to select a front-end among said plurality of front ends that matches a demand of service transmitted from one client among said plurality of clients, said selected front-end connected to said one client to transmit contents of the demand of service with respect to the selected front-end; and

permitting said broker controller to control the selected front-end so as to connect the selected front end with said server, and to control said server, said selected front-end, and the service broker from which said contents of the demand of service was transmitted for a period of time during provision of the service.--

Claim 10 has been replaced to read

--10. An on-demand service expanding system as claimed in claim 5, wherein:

said service-forecasting means involves a means for maintaining an access history with respect to Web pages by at least one of said plurality of clients, and forecasting a service, which will be used by the at least one of said plurality of clients from the history.--

Claim 11 has been replaced to read

--11. An on-demand service expanding system as claimed in claim 5, wherein:

said service forecasting means involves a means for selecting e-mails that have been addressed to the at least one of said plurality of clients based on an identifier delivered from said broker controller.--

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Claim 19 has been replaced to read

--19. A computer readable storage medium storing a program which, when executed on at least one computer or at least one communication device in an on-demand service expanding system connectable to a system provided with a server and a plurality of front ends interposed between a plurality of clients is operative for

supplying a variety of services to said plurality of clients by the use of said plurality of front ends,

implementing said services by an entrepreneur which includes a plurality of computers, including said at least one computer, in a communication network composed of a plurality of communication devices, including said at least one communication device, and the plurality of computers,

providing said plurality of service, via said entrepreneur, with respect to customers by the use of said communication network, said plurality of front ends end at least partially executing functions for processing data of the server on said at least one of said communication devices,

said on-demand service expanding system having service brokers and broker controllers; each service broker being controlled by said program for :

transferring a demand for using a service transmitted from each client and each front-end to a pertinent front-end,

transmitting said demand for controlling the pertinent front-end to said broker controller,

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administering front-end information being information as to a front-end in a communication device on which the service broker resides and containing information of an interface mounted to a front-end for connecting a client, the server, and the service broker with the front-end, a name of a service implemented by the front-end, and information of the communication device on which the front-end resides, and

providing a service broker functional interface which includes an interface by which a group of said respective means are used from the broker controller, the front-ends, and the clients; and

said broker controller residing on a computer that supplies services and operates under program control when being executed on said computer for :

administering a program included on each front-end or the server,

controlling each front-end operated on each communication device,

controlling the server operated on each computer,

controlling the service broker residing on each communication

device;

administering service administering information, and

providing an interface by which a group of said means are used

from the service brokers, the server, and the entrepreneurs;

said service administering information containing an identifier allocated by each broker controller in order that a program is discriminated by the broker controller, a name of service that can be realized by using programs in the server and each front-end, program information being information as to the programs



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including the server and each front-end, information of an interface for connecting each front-end and each broker controller with the server, server information involving a name of service implemented to the server and being information as to the server installed by each entrepreneur, information of the service broker functional interface for connecting each broker controller with a service broker residing on each communication device, information of a communication device on which each service broker resides, and a system information involving an interface for using a control function of each front-end provided by said service expanding system and being information as to the on-demand service expanding system.--

In line 1 of claim 20, the phrase --computer readable-- has been inserted before the word "storage".

In line 1 of claim 21, the phrase --computer readable-- has been inserted before the word "storage".

In line 1 of claim 22, the phrase --computer readable-- has been inserted before the word "storage".

In line 1 of claim 23, the phrase --computer readable-- has been inserted before the word "storage".

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In line 1 of claim 24, the phrase --computer readable-- has been inserted before the word "storage".

In line 1 of claim 25, the phrase --computer readable-- has been inserted before the word "storage".

***Allowable Subject Matter***

4. Claims 1-25 are pending. Claims 1-3, 8-9 and 12-25 are amended by the applicant. Claims 4-11 and 19-25 are amended via examiner's amendment. Claims 1-25 are allowed.

5. The following is an examiner's statement of reasons for allowance:

The closest prior art of Braddy (U. S. Patent 6,141,759) teaches distributing, monitoring and managing information requests on a computer network including one or more client computer systems, a first server computer system, and one or more secondary server computer systems. Information requests from the client computer system to the first server computer system are intercepted and examined by a request broker software system implemented on the first server computer system.

In regarding to independent claims 1 and 9, Braddy taken either individually or in combination with other prior art of record fails to teach or suggest an on-demand service expanding system comprising a server for supplying a variety of services, a plurality of

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clients , a plurality of front-ends, service broker, and service controller; the service broker selects a front-end among the plurality of front ends that matches a demand service transmitting from one client among the plurality of clients, the selected front-end connected to said one client to transmit contents of the demand of service with respect to the selected frond ends; and the broker controller controls the selected front-end so as to connect the selected front-end with the server, and said selected front-end and the service broker from which said contents of the demand of service was transmitted for a period of time during provision of the service.

In regarding to independent claims 2 and 19, Braddy taken either individually or in combination with other prior art of record fails to teach or suggest an on-demand service expanding system comprising a server, a plurality of front-ends, a plurality of clients, entrepreneurs for providing variety of services to customers, service brokers and broker controllers; each service broker being provided with transferring a demand for using a service transmitted from each client and each front-end to a pertinent front-end, transmitting said demand for controlling the pertinent front-end to the broker controller, administering front-end information, and providing a service broker functional interface; and the broker controlling being providing with administering a program, controlling each front-end, controlling the server, controlling the service broker, administering service administering information, and providing an interface by which a group of functions are used from the service brokers, the server, and the entrepreneurs.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The article titled "iSpheres <sup>TM</sup>Premiers e-Service Broker <sup>TM</sup> at DEMO 2000" (PR Newswire, February 7, 2000) discloses persistent matching and real-time, two way alerting service system that identify the precise information service providers and subscribers are seeking and notify them when a match is made.

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***Inquire***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Cheung whose telephone number is (703)-305-0084. The examiner can normally be reached on Monday – Thursday from 10:00 AM to 7:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell, can be reached on (703) 305-9768.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

The fax phone number for the organization where this application or proceedings is assigned are as follows:

(703) 872-9306      (Official Communications; including After Final  
Communications labeled "BOX AF")  
(703) 746-5619      (Draft Communications)

Hand delivered responses should be brought to Crystal Plaza Two, Room 1B03.

Mary Cheung  
Patent Examiner  
Art Unit 3621  
October 21, 2004